Illinois Department of PUBLIC HEALTH

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M E M O R A N D U M

To: Local Health Department Directors of Environmental Health

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Subject: Recommendations for Mosquito Surveillance and Control after Flooding

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Large numbers of floodwater mosquitoes (*Aedes vexans* and other species) appear about 2 weeks after heavy rains and flooding. Floodwater mosquitoes are rarely infected with West Nile virus, thus control of this group is not a priority for public health agencies. Effective control of "nuisance" floodwater mosquitoes requires a systematic ***regional*** abatement program that includes larviciding. On-going, non-emergency, systematic "nuisance" mosquito abatement costs from $5,000 to $15,000 per square mile per year.

After flooding, water impoundments initially produce large numbers of floodwater mosquitoes. Those "old" water impoundments may concentrate during hot summer days and start to produce large numbers of *Culex* mosquitoes. Consequently, local agencies within municipal boundaries should continue to focus mosquito larvicide treatments on catch basins, ditches and "old" water impoundments that may produce *Culex* mosquitoes. Treatment of water impoundments in unincorporated rural areas depends on available funding (and the funds needed would be substantial to treat such sites). In unincorporated rural areas, the use of insect repellents and other personal protection measures may be the only practical methods for preventing mosquito bites.

For prevention of West Nile virus, IDPH recommends that municipalities target the primary vector of WNV, the house mosquito (*Culex pipiens*),
see http://www.cdc.gov/ncidod/dvbid/westnile/insects.htm

The *Culex* mosquito breeds in catch basins, ditches, etc., particularly during hot summer weather, see:
http://www.idph.state.il.us/envhealth/wnvmuni_recs.htm
A program aimed specifically at control of *Culex* mosquitoes can be conducted with less funding than a program aimed at control of both *Culex* and floodwater mosquitoes.

The large amount of pooled water that remains after a flood provides an ideal breeding ground for mosquitoes. While the majority of these mosquitoes will be merely pests, some can carry communicable diseases such as West Nile virus.

To protect yourself from mosquitoes, you should —

- Be sure door and window screens are tight-fitting and in good repair.
- Wear long-sleeved and long-legged clothing.
- Check to see that your mosquito repellent contains DEET, a chemical commonly found in these products. Other effective mosquito repellents contain picaridin, oil of lemon eucalyptus and IR3535. When outdoors, apply repellent sparingly to exposed skin or clothing, as indicated on the product's label. Consult a physician before using repellents on infants.
- Drain standing water in old tires, tin cans, bird baths, yard ornaments or other places where mosquitoes might breed.
- In communities where there are organized mosquito control programs, contact your municipal government to report areas of stagnant water in roadside ditches, flooded yards and similar locations that may produce mosquitoes.